MILLER BROOKS
Environmental, Inc.

January 17, 2005

Ms. Jo Bentz
Regional Water Quality Control Board – North Coast region
5550 Skylane Boulevard, Suite A
Santa Rosa, CA 95403

RE: **Quarterly Summary Report-Fourth Quarter 2004**
Miller Brooks Environmental, Inc. Project No.: 06-459-4935-05

Dear Ms. Bentz:

On behalf of ConocoPhillips Company (ConocoPhillips), Miller Brooks Environmental, Incorporated (Miller Brooks) is forwarding the quarterly summary report for the following location:

Service Station	**Location**
76 Service Station No. 4935 COP NO. WNO.1333	2200 Mendocino Avenue Santa Rosa, California

Sincerely,
Miller Brooks Environmental, Incorporated

REGISTERED GEOLOGIST
JED A. DOUGLAS
NO. 7516
STATE OF CALIFORNIA

Jed Douglas, R.G. No. 7516
Senior Geologist

Attachments: Site Plan
Extended Site Plan

cc: Mr. Thomas Kosel, ConocoPhillips
Mr. John Anderson, County of Sonoma Public Health Division, 3273 Airway Drive, Suite D, Santa Rosa, CA 95403
Mark McCormick/Andrea Jensen, Santa Rosa Fire Department, 955 Sonoma Avenue, Santa Rosa, CA 95404

QUARTERLY SUMMARY REPORT
Fourth Quarter 2004

76 Service Station No. 4935
2200 Mendocino Avenue
Santa Rosa, California

City/County ID #: Case No. 1TSR101

County: Sonoma

PREVIOUS ASSESSMENT

In July 1989, a 280-gallon used-oil underground storage tank (UST) was removed from the site. A ¼ inch hole was observed in the UST, and subsequently approximately 20 cubic yards of soil were overexcavated and one soil sample was collected form the bottom of the excavation at a depth of approximately 8 feet below ground surface (bgs). The soil sample did not contain detectable concentrations of total oil and grease (TOG) or total petroleum hydrocarbons as diesel (TPHd).

In February 1995, a 520-gallon used-oil UST was removed from the site. No holes were observed in the UST, and the UST appeared to be in good condition. Groundwater was observed in the UST cavity at a depth of approximately 7 feet bgs. Soil and groundwater samples did not contain detectable levels of petroleum hydrocarbons with the exception of one side wall sample which contained TPHd (8.9 milligrams per kilogram [mg/kg]). Approximately 18 cubic yards of soil and 1,250-gallons of groundwater were removed from the used-oil UST cavity.

In September 1997, Pacific Environmental Group Inc. (Pacific) performed a soil gas survey at the site. Results of the soil gas survey indicated that elevated petroleum hydrocarbons were present beneath the site. TPH as gasoline (TPHg), benzene, and methyl tertiary butyl ether (MTBE) were detected at concentrations up to 32,000, 640, and 19,000 micrograms per liter (µg/L), respectively.

In June 1998, Environmental Resolutions Inc. (ERI) installed onsite groundwater monitoring wells MW1 through MW4. TPHg, benzene, and MTBE were not detected in soil samples collected from wells MW-1, MW-3, and MW-4 at a depth of 5 feet bgs. TPHg, benzene, and MTBE were detected at a concentration of 110, 0.071, and 0.67 mg/kg, respectively in the soil sample collected from MW-2 at a depth of 5 feet bgs.

In July and August 1999, ERI removed two gasoline USTs, two dispenser islands, five hydraulic hoist hoists, a clarifier, and the associated product piping. Following overexcavation activities, TPHg, TPHd, benzene, and MTBE were detected at concentrations up to 2,000, 55, 5.7, and 28 mg/kg, respectively. The majority of the hydrocarbon affected soil was located to the southwest of the former UST cavity. Groundwater was present in the UST cavity at a depth of approximately 7 feet bgs, and the groundwater sample collected from the UST cavity contained TPHg, TPHd, benzene, and MTBE at a concentration of 38,000, 6.1, 690, and 14,000 µg/L, respectively.

In March 2000, ERI installed one groundwater monitoring well (MW-5). One soil sample was collected from MW-5 at a depth of 2.5 feet bgs and did not contain concentrations of TPHg or benzene at or above the laboratory detection limit, however, MTBE was detected at a concentration of 0.27 mg/kg.

In November 2001, ERI installed four off-site groundwater monitoring wells (MW6S, MW6D, MW7S, and MW7D), and advanced two off-site soil borings (B9 and B10), in the Mendocino Avenue right-of-way. Soil samples were collected at a depth of 5 feet bgs in borings MW6D, MW7S, B9, and B10. The soil samples did not contain concentrations of TPHg, benzene, or MTBE at or above the laboratory detection limit.

On January 15, 2002, ERI collected a groundwater sample from the irrigation well located 2236 Rowe Drive (Rowe Well). The groundwater sample did not contain concentrations of TPHg or benzene at or above the laboratory detection limit, however, MTBE was reported at a concentration of 5.6 µg/L. In addition, volatile organic compounds (VOCs) were not detected in the groundwater sample with the exception of cis-1,2-Dichloroethene and tetrachloroethene which were reported at a concentration of 220 and 46 µg/L, respectively.

In July 2002, ERI installed two off-site groundwater monitoring wells (MW8S and MW8D). One soil sample was collected from MW8D at a depth of 5 feet bgs, and was reported to contain TPHg, benzene, and MTBE at a concentration of 120, 0.44, and 3.7 mg/kg, respectively.

In April through June 2003, ERI advanced five cone penetrometer test (CPT) borings (CPT1 through CPT5) and installed six groundwater monitoring wells (MW5D, MW9S, MW10S, MW11S, MW11D, and MW12S). Grab groundwater results from the CPT borings indicated elevated hydrocarbon concentrations in shallow groundwater samples (approximately 8 to 18 feet bgs) as TPHg, benzene, and MTBE were present up to 4,300, 2.1, and 330 µg/L, respectively. Deep groundwater samples collected from the CPT borings (approximately 50 and 67 feet bgs) did not contain TPHg and benzene at or above the laboratory detection limit. MTBE was detected at concentrations up to 10 µg/L in groundwater samples collected at approximately 50 feet bgs, however, MTBE was not detected at or above the laboratory detection limit in groundwater samples analyzed from 67 feet bgs. Soil samples collected during the investigation were not submitted for laboratory analysis.

In August 2003, ERI installed one extraction well (EX1) and two observation wells (OB1 and OB2) in the parking lot of a neighboring dry cleaner facility. In September 2003, ERI performed a groundwater pump test and a vacuum enhanced groundwater extraction test. ERI concluded that groundwater is unconfined with a calculated transmissivity of 361.6 gallons/day/foot, with a corresponding hydraulic conductivity of 3.22 ft/day. ERI estimated a sustainable flow during vapor enhanced groundwater extraction of 0.5 gallons per minute, and an associated downgradient capture zone of approximately 16 feet. ERI estimated the lateral extent of the capture zone to be approximately 50 feet.

In December 2003, Miller Brooks destroyed two offsite groundwater monitoring wells (MW-8S and MW-8D) due to pending construction activities at the neighboring Safeway property.

In March and April 2004, GeoTrans Inc. (GeoTrans) performed soil excavation activities in the adjacent Safeway property, prior to construction activities for a new Safeway building. The excavated area was approximately 3,400 square feet with an average depth of 9 feet bgs.

Following the excavation was activities, hydrocarbon affected soil was present to the west (up to 1,100 mg/kg TPHg) and south (up to 11 mg/kg TPHg), however further excavation was performed due to the location of Mendocino Avenue to the west and the 76 station property to the south.

In July 2004, Miller Brooks installed two wells (MW-8Sr and MW-8Dr) in order to replace the destroyed wells (MW-8S and MW-8D). During the installation of wells MW-8Sr and MW-8Dr, TPHg, benzene, and MTBE were detected in the soil samples at concentrations up to 9,500, 34, and 220 mg/kg.

SENSITIVE RECEPTORS

In 2000, ERI completed an agency well survey from well records with the State of California Department of Water Resources (DWR), within a one-half mile radius of the site, and completed an underground utility study. This survey identified six potential groundwater supply wells within the survey area, which included four domestic wells, one irrigation well, and one well with unknown use. The closest well to the site is located approximately 660 feet southwest (crossgradient) of the site.

In 2002, ERI completed a door-to-door well survey of properties connected to the municipal water supply system with wells and properties not connected to the municipal water supply within a one-half mile radius of the site. During ERI's door-to-door well survey, ERI confirmed the existence of six water supply wells in the search radius. Two of these wells were reported as not in use, and four wells were reported as in use for irrigation purposes. The closest well to the site is located approximately 500 feet northwest (downgradient) of the site. This well (Rowe well) is reportedly inactive due to VOC and hydrocarbon impact.

MONITORING AND SAMPLING

During the most recent groundwater monitoring and sampling event, conducted on November 11, 2004, groundwater was present at depths ranging from 3.42 to 15.15 feet below the top of casing (TOC) in the shallow wells and 5.20 to 19.62 feet below TOC in the deep wells. The groundwater flow direction in the shallow wells was reported towards the southwest at a gradient of 0.03 ft/ft, which is consistent with the historical monitoring data. The groundwater flow direction in the deep wells was reported towards the southeast at a gradient of 0.10 ft/ft, which is consistent with the last monitoring event. Historically, the deep groundwater flow direction has been westerly. During the November 11, 2004 sampling event, TPHg, benzene, and MTBE were present at concentrations up to 8,400; 21; and 1,300 (µg/L), respectively with the highest concentrations in the vicinity of well 10S (TPHg) and MW-8Dr (benzene and MTBE).

REMEDIATION STATUS

Approximately 20 cubic yards of soil were overexcavated during the July 1989 used-oil UST removal. Approximately 18 cubic yards of soil and 1,250-gallons of groundwater were removed during the February 1995 used-oil UST removal. Approximately 3,216 tons of soil and 5,000 gallons of groundwater were removed from the site during the 1999 UST replacement activities. Approximately 1,596 gallons of groundwater were extracted during the groundwater test conducted in 2003. ERI estimated that approximately 0.240 pound of TPHg and 0.107 pound of MTBE were removed from groundwater during the test. The estimated daily dissolved-phase

removal rates for groundwater extraction at a rate of 0.8 gallons per minute (gpm) were 0.173 pound of TPHg per day and 0.077 pound of MTBE per day. Safeway excavated and disposed of 2,071.76 tons of hydrocarbon affected soil and 25,500-gallons of groundwater during the 2004 over-excavation activities. Historically, a cumulative total of approximately 5,345 tons of soil and 33,341-gallons of groundwater have been removed from the site.

CHARACTERIZATION STATUS

Groundwater does not appear to be delineated at the site.

RECENT CORRESPONDENCE

There was no correspondence during the reporting period.

THIS QUARTER ACTIVITIES (Fourth Quarter 2004)

1. The groundwater was monitored and sampled by TRC.
2. Miller Brooks submitted a well destruction and installation report, a groundwater sampling plan, an additional subsurface site assessment activities workplan, and a feasibility of interim remedial action workplan.

WASTE DISPOSAL SUMMARY

No waste was disposed of during the reporting period.

NEXT QUARTER ACTIVITIES (First Quarter 2005)

1. Groundwater monitoring and sampling will be performed by TRC.
2. ConocoPhillips has selected Delta Environmental Consultants, Inc. as the new lead consultant for this site.

CONSULTANT: Miller Brooks Environmental, Incorporated

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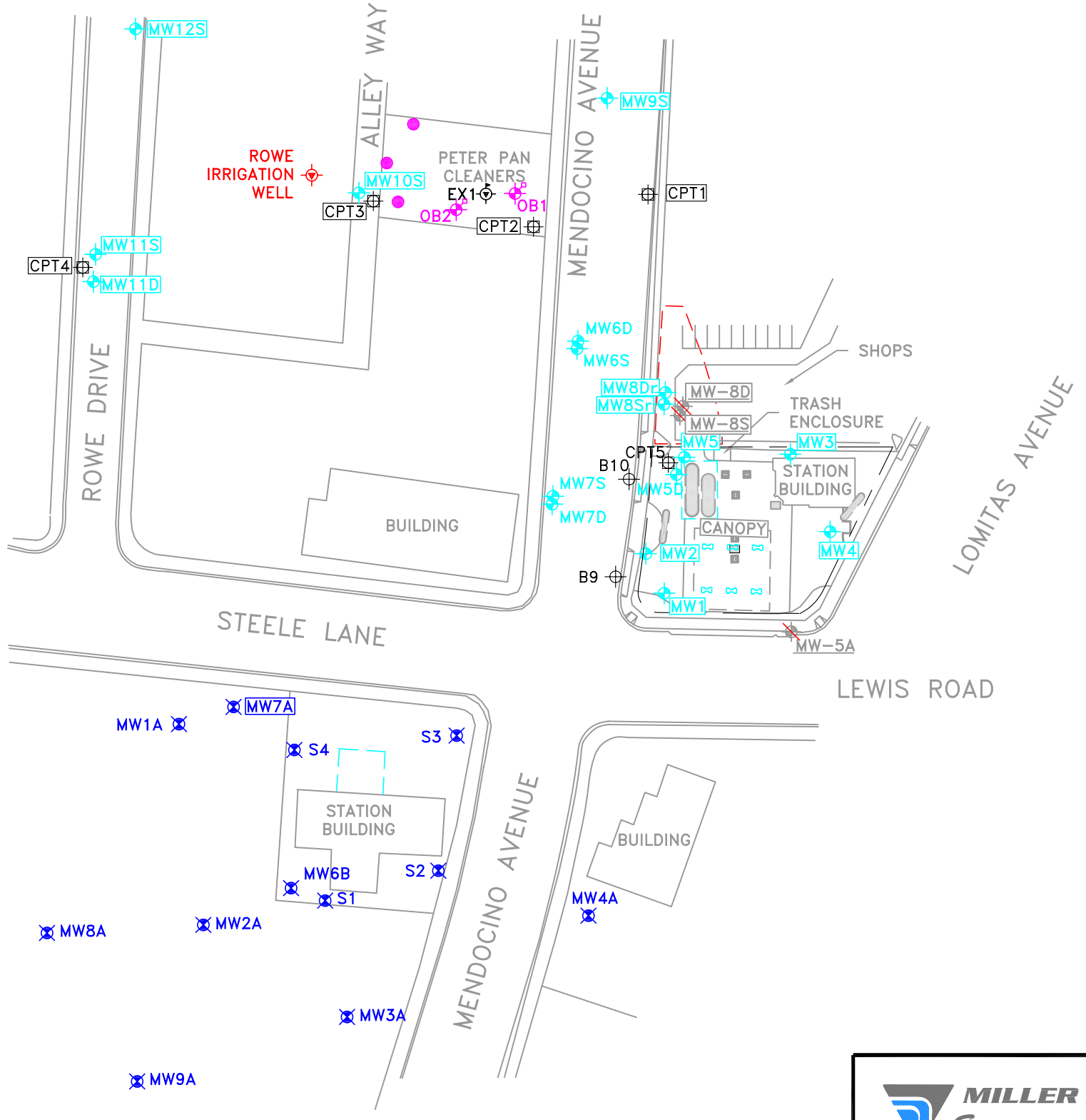

LEGEND

- MW1 — GROUNDWATER MONITORING WELL
- MW3A — SHELL GROUNDWATER MONITORING WELL BY OTHERS
- B10 — SOIL BORING
- SOIL BORING BY OTHERS
- CPT1 — CPT SOIL BORING
- WATER SUPPLY WELL
- MW-5A — ABANDONED GROUNDWATER MONITORING WELL
- EX1 — GROUNDWATER EXTRACTION WELL
- OB1 — GROUNDWATER OBSERVATION WELL
- UNDERGROUND STORAGE TANK AREA
- FORMER UNDERGROUND STORAGE TANK
- DISPENSER ISLAND
- FORMER DISPENSER ISLAND
- FORMER WASTE OIL TANK
- FORMER CLARIFIER
- FORMER HOIST
- APPROXIMATE LIMIT OF SOIL EXCAVATION
- PROPERTY LINE

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W E
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0 100 FEET
SCALE

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720 SOUTHPOINT BLVD., SUITE 207
PETALUMA, CA 94954
(707) 765-0466

PROJECT NO. 06-459-4935-04

DRAWN BY:	DCN
DATE:	07/27/04
REVISED BY:	DCN
REVISED:	07/27/04
APPROVED BY:	JAS
DATE:	07/27/04

EXTENDED SITE PLAN

76 STATION 4935
2200 MENDOCINE AVENUE
SANTA ROSA, CA

FIGURE 2

FILE: K:\DWGS\C-P\NO. 4935 (2200 MENDOCINE AVENUE)\SP 07-27-04
DATE PLOTTED: 07/27/04